



Lighting: Replacing Light Emitting Diode

The Light Angel is an easy to install, portable, indoor/outdoor light source that uses motion sensor technology. It has 7 LEDs and 360 degree rotation.

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INTRODUCTION

Use this guide to replace a broken LED bulb in a Light Angel motion activated LED. Disassembling the device requires a Phillips screwdriver and a plastic opening tool. Replacing the LED bulb requires knowledge of soldering. For users with basic soldering experience, this project will take about 30 minutes.



TOOLS:

- [Magnetized jeweler's #1 Phillips screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)
- [Soldering Station](#) (1)
- [Solder](#) (1)
- [Desoldering Braid](#) (1)



PARTS:

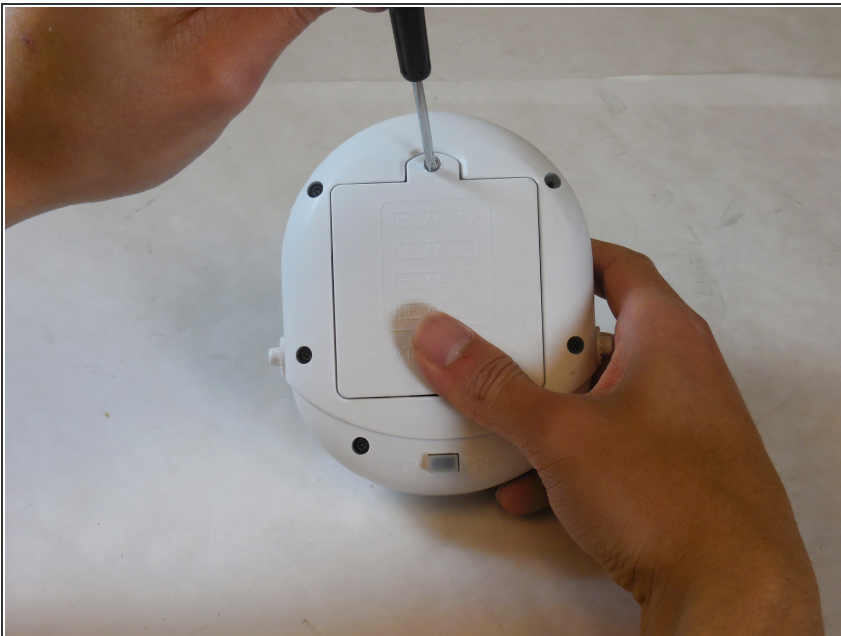
- [IR LED](#) (1)

Step 1 — Light Emitting Diode



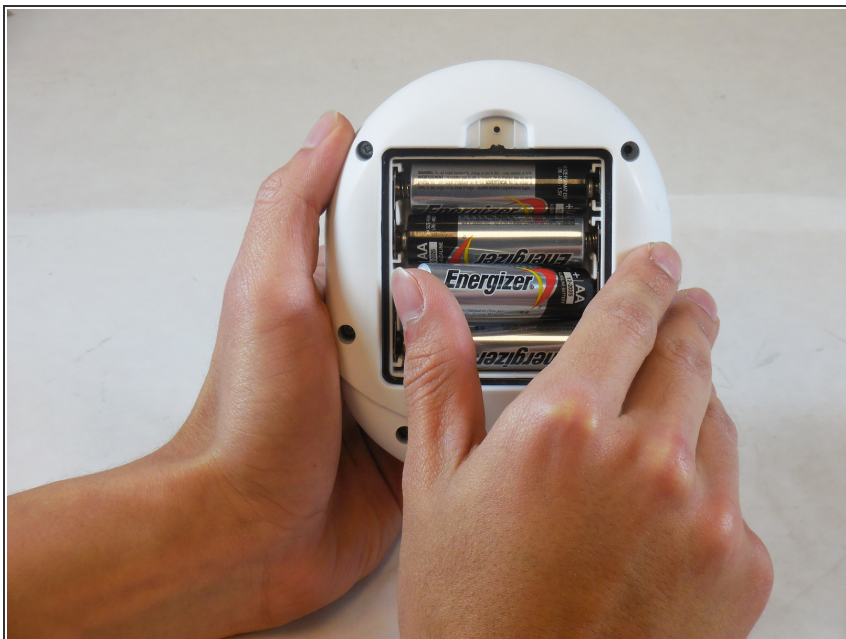
- Using a plastic opening tool, remove the base of the Light Angel.
- ⓘ Insert the plastic opening tool between the base and the LED housing and pull outwards on the handle.

Step 2



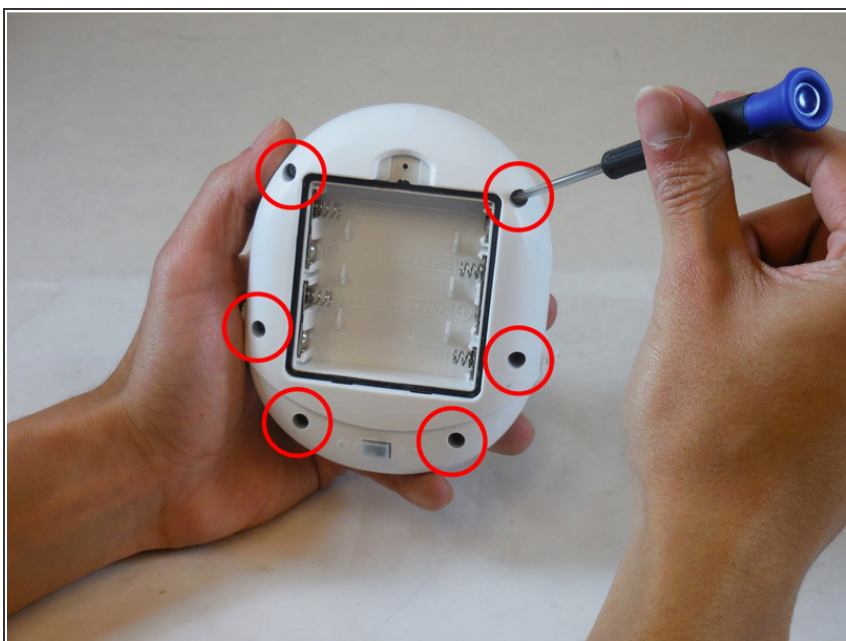
- Using a Phillips head jeweler's screwdriver, remove the screw on the battery housing.
- ⓘ To remove the screw, turn counterclockwise.
- ⚠ Remember to put all the screws you take out somewhere safe so you can find them when it's time to reassemble the light.

Step 3



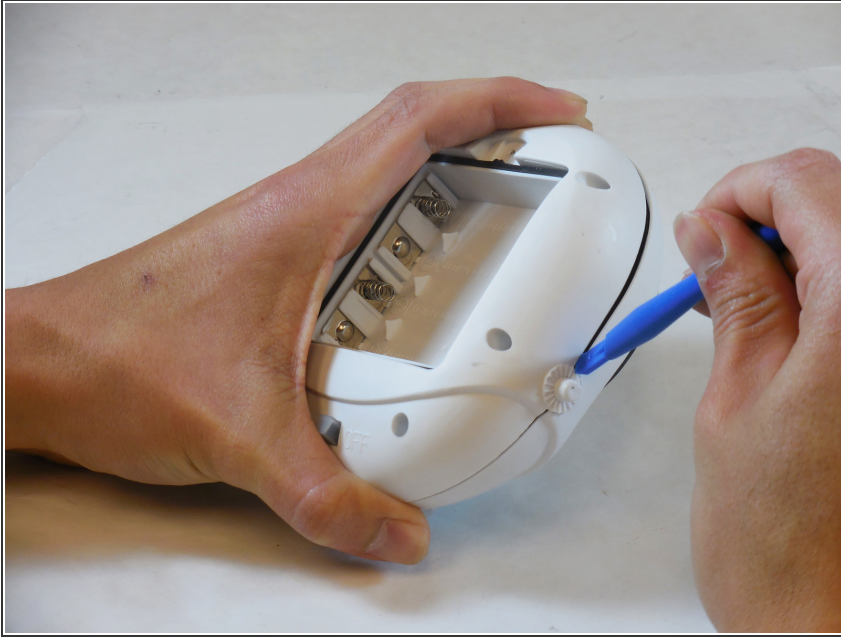
- Remove and set aside the (4) AA batteries in the battery housing.

Step 4



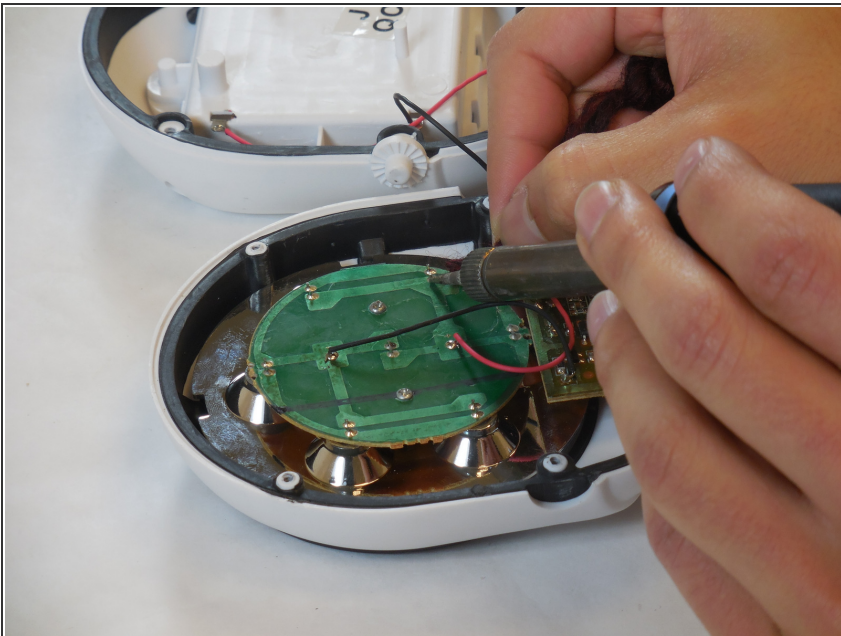
- Using a Phillips head jeweler's screwdriver, remove the (6) screws holding the LED housing together.
- ⓘ To remove the screws, turn counterclockwise.

Step 5



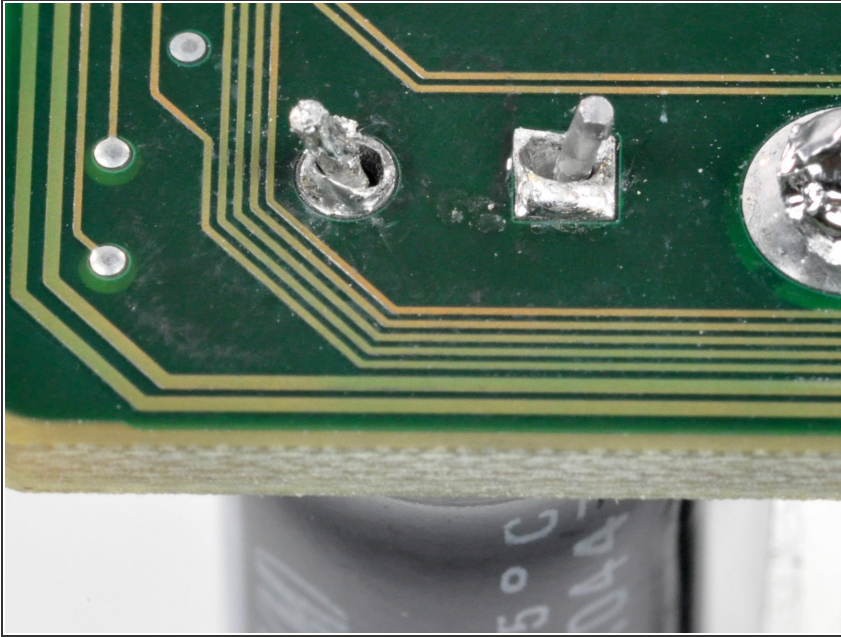
- Insert the plastic opening tool into the crease on the side of the LED housing to separate it from the rest of the device.

Step 6



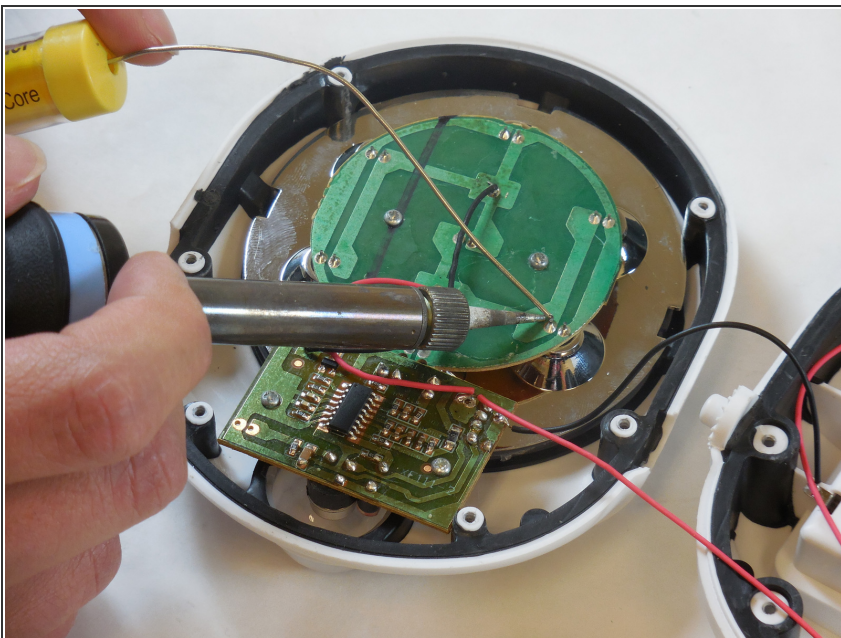
- Locate the faulty light emitting diode on the back of the circuit board.
 - Using a soldering iron and desoldering braid, unsolder the connection on the light emitting diode.
- ⚠ Do not allow the soldering iron to come in contact with other components on the circuit board.
- ⓘ For detailed instructions on how to solder go to [How To Solder and Desolder Connections](#)

Step 7



- Insert the new light emitting diode through the two holes left from removing the old one.
- ⓘ Note: the picture is not of the Light Angel circuit board. It is a general example of inserting a light emitting diode on a circuit board. Photo Credit: [How To Solder and Desolder Connections](#)

Step 8



- Using solder and a soldering iron, solder the new LED to the circuit board.
- ⚠ Keep your solder joints separate to avoid short circuiting the circuit board.

Step 9



- Reassemble the Light Angel by performing steps 1 through 5 in reverse.

To reassemble your device, follow these instructions in reverse order.

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